

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE THE APPLICATION OF)
Kermarec, et al.) Examiner: Joseph E. Avellino
SERIAL NO.: 10/054,207) Group Art Unit: 2143
FILED: January 22, 2002) Customer Number: 23644
FOR: Methods of Establishing Virtual Circuits) Docket No. 920569-905833
and of Providing a Virtual Private)
Network Service Through a Shared)
Network and Provider Edge Device)
for Such)

SUCCINCT STATEMENT IN SUPPORT
OF PRE-APPEAL BRIEF REQUEST FOR REVIEW

Honorable Director of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

As required under the pilot program initiated July 12, 2005, the following is the applicants' Statement in Support of the Appeal Brief Conference for this application.

The Examiner rejects claim 20 under 35 U.S.C. 103(a) as being unpatentable over Jain (US 6,765,914) in view of Walker (US 6,701,375) and in further view of Goodwin (US 2002/0124107).

Claim 20 has not been amended. As clearly explained in Applicants' many responses, and as agreed by the Examiner in numbered section 16 on page 8 of the final Office Action of March 19, 2008, the following features are absent from Jain and Walker:

- (i) establishing a virtual circuit in a shared network infrastructures, in response to the detection of whether a pair of CE interfaces allocated to said VPN and belonging to two PE devices correspond to a common VLAN identifier ;

- (ii) establishing a virtual circuit in a shared network infrastructure, for forwarding frames including said common VLAN identifier.

Indeed, with respect to (i), in Jain, there is no need to detect whether a pair of host-switch interfaces belonging to two different switches would correspond to a common VLAN ID so as to establish a virtual circuit in the shared network infrastructure between two switches. On the contrary, as soon as the manual configuration step of Jain is completed, a packet sent by a sending host can be routed to a destination host based on the MAC address of the destination host. If the destination MAC address (and not the VLAN ID as identified by the Examiner) does not belong to a local switch port, the packet is forwarded to the switch's bus connecting port, then to the bus and it is retrieved by all other switches before being accepted by the destined switch based on the destination MAC address (steps 710, 730, 735, 740 and 750). As a result, Jain does not disclose establishing a connection, in response to a detection that is absent from its teaching.

Jain does not disclose (ii), either. Jain teaches only a connection, and not a virtual circuit in a shared network infrastructure.

With regard to Walker, Walker does not disclose (i), particularly since it does not teach detecting whether a pair of CE interfaces allocated to said VPN and belonging to two PE devices correspond to a common VLAN identifier (VLAN is a notion which is totally absent from Walker).

Walker does not disclose (ii), either, because the virtual circuit of Walker is not meant to forward frames including a common VLAN identifier (no VLAN identifier being used in Walker).

Since Jain and Walker are missing both (i) and (ii), combination of their teachings necessarily is also missing (i) and (ii). *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) and *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) cited by the Examiner simply do not support the Examiner's position. If features (i) and (ii) are missing from both Jain and Walker, features (1) and (ii) cannot suddenly appear in their combination.

The Examiner admits that neither Jain nor Walker disclose the feature of claim 20 of the present application : "learning a correspondence between said CE interface and each VLAN identifier included in said at least one tagged frame". The Examiner argues, however, that such feature is taught by Goodwin.

Turning now to Goodwin, Goodwin discloses an inter-switch VLAN advertisement protocol called VAP. According to this protocol, the VLAN membership databases stored on a switch may be synchronized with other switches in the network.

In this way, a distant endstation connected to a distant switch (e.g. the endstation B connected to the switch 186 in Fig.3) can have its VLAN membership 10 updated in the database of a local switch (e.g. the switch 182 in Fig.3), through advertisement between the switches (paragraph [0044]).

But, according to Goodwin, the distant switch connecting the distant endstation knows that this distant endstation belongs to VLAN 10, as it is contained in its database from the beginning (paragraph [0044] or paragraph [0049]). This provisioning may be entered manually, for instance.

Thus, the learning by Goodwin only relates to VLAN membership propagated over the backbone. But a switch always knows the VLAN membership of the endstations connected to it. In other words, no learning of VLAN membership of an endstation to its connecting switch is disclosed or suggested by Goodwin.

In contrast, the learning of the present invention relates to a correspondence between a CE interface (all the more allocated to a given VPN) which has received a tagged frame previously from a (local) CE device and a VLAN identifier included in said tagged frame. When transposed onto Fig.2 of Goodwin, this would mean that the learned correspondence would be, e.g., between the interface between the switch 156 and the endstation B and a VLAN identifier included in a tagged frame previously received from the endstation B by the switch 156. This is not disclosed or even suggested by Goodwin.

Thus, Goodwin does not teach the learning claimed in claim 20 of the present invention, which the Examiner has admitted is missing also from Jain and Walker.

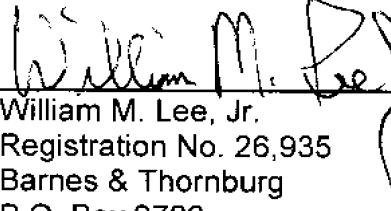
Furthermore, just like Jain and Walker, Goodwin also does not disclose the features (i) and (ii) mentioned above. Thus, at least three elements of Claim 20 are missing from the combination of Jain, Walker and Goodwin.

In conclusion, even when their teachings are combined, Jain, Walker and Goodwin do not disclose the subject matter of claim 20 of the present application. The same applies to Claim 49 for the same reasons. Claims 21-33 and 50-58 are submitted to be allowable, as well, particularly since they depend on Claim 20 or 49 directly or indirectly.

It is therefore submitted that the Examiner's rejections of the claims of this application are untenable as has been consistently argued by the applicants for many responses, and were this application to proceed to the Board of Appeals and Interferences, the Examiner would clearly be reversed. The results of this review are therefore awaited.

May 27, 2008

Respectfully submitted,



William M. Lee, Jr.
Registration No. 26,935
Barnes & Thornburg
P.O. Box 2786
Chicago, Illinois 60690-2786
(312) 214-4800
(312) 759-5646 (fax)